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			2161	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/693,809

Applicant(s)

MERRITT, KENNETH P.

Examiner

Susan Y. Chen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This office action is in response to the amendment filed on 08/28/06.

Claims 1-20 are pending for examination, claims 1, 5, 9-11, 13-14 and 18-20 have been amended.

Specification

The amended specification to overcome the objection on record has been acknowledged and kept on record.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6-19, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,222,533 issued to Notani et al. (hereinafter referred as Notani) in view of U.S. Patent No. 6,999,956 issued to Mullins.

Claim 1:

Notani discloses the claimed method for automating the creating and maintenance of a database application and retrieving data therefrom [e.g., Abstract], comprising:

building said application persistence and measure databases, including creating SQL and generating a first set of programs to retrieve data from source systems [e.g., the use of unit 18 to build unit 10, Fig. 1 and associated texts; the use of unit 92 of Fig. 3 and associated texts; col. 6, lines 46 - col. 7, lines 46];

storing the data in configuration tables [e.g., the tree, tree-table, etc. data-aware at col. 4, lines 50-55, Fig. 6 and associated texts; col. 9 lines 8-48];

activating a second set of programs to read the configuration tables [e.g., col. 7, lines 21-25 & Fig. 6 and associated texts];

formatting the data based on defined data measures [e.g., col. 9, lines 33-48];
and

loading the data into said database application [e.g., the dynamically loading an adapter technique, col. 6, lines 38-45].

Notani did not specifically disclose the creating of XML files and SQL statement.

However, Mullins expressly discloses the creating of XML files and SQL statement [e.g., Abstract; col. 6, lines 64 - col. 7, lines 45; Fig(s). 4-6 and associated texts].

Notani and Mullins are both in the same endeavor to support the dynamic data querying and retrieving processing via the open Internet database architecture, thus, with the teachings of Notani and Mullins in front of him/her, it would have been obvious

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for an ordinary skilled person in the art at the time the invention was made to be motivated to modify Notani's invention with the well-known creating of XML files and SQL statements as taught by Mullins, because by do so, as suggested by Mullins the combined invention will be upgraded to accessing the separately created XML files and SQL queries that results in simple and rapid application development and lowered maintenance cost of a computer system plus improving the flexibility of the object application and reducing the brittleness of the object application [e.g., Mullins: col. 10, lines 6-20].

Claim 2:

Except the features recited in claim 1, the combined invention of Notani and Mullins further discloses loading the data further comprises generating control tables to control the loading, including determining which of the data measures are to be loaded and when loading occurs [e.g., Notani: the tables created at col. 4, lines 25-57].

Claim 3:

Except the features recited in claim 1, the combined invention of Notani and Mullins further discloses that configuration tables include: control, product, dimension, level, hierarchy, user ID, logging, and security tables [e.g., Notani: col. 4, lines 47-57].

Claim 4:

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Except the features recited in claim 1, the combined invention of Notani and Mullins further discloses running a script to execute the first and second set of programs [e.g., Notani: the use of JAVABEANStm, ACTIVEXtm, col. 4, line 31-46].

Claim 6:

Except the features recited in claim 1, the combined invention of Notani and Mullins further discloses programs input measure data for the measure database, the measure data residing in staging tables and fact tables [e.g., Natani: col. 3, lines 53-64 & col. 4, lines 10-24].

Claim 7:

Except the features recited in claim 3, the combined invention of Notani and Mullins further discloses inputting spreadsheet information into the product tables, dimension tables, level tables, and hierarchy tables [e.g., Natani: col. 4, lines 47-57].

Claim 8:

Except the features recited in claim 1, the combined invention of Notani and Mullins further discloses a warehouse manager program to facilitate data storage and retrieval [e.g., Natani: the unit 14, Fig. 1 and associated texts; col. 6, lines 66 – col. 7, line 6].

Claim 9:

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Except the features recited in claim 1, the combined invention of Notani and Mullins further discloses building said persistence database using a utility program, such that the configuration files are inputs to the utility program [e.g., Notani: the units: 64, 72, 74, 84, 108, 109, etc. of Fig. 3, the data adaptation dimension technique at col. 7, lines 26-40].

Claim 10:

Except the features recited in claim 9, Notani further discloses providing a utility program with SQL statements [e.g., the external SQL interface utility at col. 5, line 55-57].

Notani did not specifically disclose that configuration files, converting the XML files to meta data.

However, Mullins discloses converting the XML files to meta data [e.g., Mullins: col. 3, lines 14-28 & col. 16, lines 36-54; Fig. 7 and associated texts].

Notani and Mullins are both in the same endeavor to support the dynamic data querying and retrieving processing via the open Internet database architecture, thus, with the teachings of Notani and Mullins in front of him/her, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to be motivated by modifying Notani's invention with the well-known technique as taught by Mullins to convert XML files to meta data, because by do so, as suggested by Mullins the combined invention will be particularly helpful in optimizing the performance of an object program application via directly accessing or re-use the stored data in a cache

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that including the converted XML files to meta data [e.g., Mullins: col. 3, lines 14-28 & col. 16, lines 36-54; Fig. 7 and associated texts].

Claim 11:

Except the features recited in claim 10, the combined invention of Notani and Mullins further discloses installing the configuration files including installing information for location for middleware components and other database in an open communication network [e.g., Notani: col. 6, lines 38-45 & Fig. 3 and associated texts].

Claim 12:

Except the features recited in claim 1, Notani did not expressly disclose that the XML file defines a skeleton of the database, including dimension, levels, and measures

However, Mullins discloses an XML file that defines a skeleton of the database, including dimension, levels, and measures [e.g., Mullins: col. 24, lines 59 – col. 25, lines 7; Fig(s) 2, 7 and associated texts].

Notani and Mullins are both in the same endeavor to support the dynamic data querying and retrieving processing via the open Internet database architecture, thus, with the teachings of Notani and Mullins in front of him/her, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to be motivated by modifying Notani's invention with the well-known technique as taught by Mullins to use an XML file that defines a skeleton of the database, including dimension, levels, and measures, because by do so, as suggested by Mullins the combined

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invention will support a dynamic O/X (object to XML), R/X(relational to XML) and O/R (object to relation) mapping that results in a flexible and scaleable editing of the skeleton [e.g., Mullins: col. 24, lines 59 - col. 25, lines 7].

Claim 13:

Except the features recited in claim 1, the combined invention of Notani and Mullins further discloses loading the data into the database application includes generating a load file for loading hierarchy instances and targets, and placing the load file in an administrative directory [e.g., Notani: col. 7, lines 58 – col. 9, line 7].

Claim 14:

Except the features recited in claim 1, the combined invention of Notani and Mullins did not specifically disclose the dimension table including: a master dimension source table; a table holding views; a table holding hierarchy level information for each dimension; a table containing information to each level; a table containing information to each measure; a table holding lookup information for location; a table holding information for level members; a table holding data for intersections of the database; tables containing user ID, password, and security information; and tables holding each process and each event of each process.

However, since these claimed tables can be created by using the well-known SQL "create table (x-table-name)" statement, hence, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to apply the well-

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known SQL table creation command for creating dimension tables as claimed into Notani's invention, because by doing so, the modified system will provides the set of tables to store intended data for later use as desired by an user.

Claim 15:

Except the features recited in claim 1, the combined invention of Notani and Mullins did not specifically disclose generating a master measure source table; holding dimensionality information for each of the measures; addressing level members; and generating measure data tables.

However, since these claimed tables can be created by using the well-known SQL "create table (x-table-name)" statement, hence, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to apply the well-known SQL table creation command creating the claimed tables into Notani's invention, because by doing so, the modified system will provides the set of tables to store intended data for intended usage as desired by an user.

Claim 16:

Except the features recited in claim 15, the combined invention of Notani and Mullins did not specifically disclose generating programs to read the master measure source table and the dimensionality information, the programs automatically generate SQL for the tables.

However, since these claimed tables can be read by using the well-known "read" instruction written in a conventional application program, hence, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to apply the conventional program command reading the claimed tables into Notani's invention, because by doing so, the modified system will retrieve the intended data from the set of tables for predefined usage as desired by an user.

Claim 17:

Except the features recited in claim 3, Notani did not specifically disclose that generating logger tables to log process.

However, Mullins discloses generating logger tables to log processes [e.g., Mullins: the rollback log at col. 44, line 60].

Notani and Mullins are both in the same endeavor to support the dynamic data querying and retrieving processing via the open Internet database architecture, thus, with the teachings of Notani and Mullins in front of him/her, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to be motivated by modifying Notani's invention with the well-known logging technique as taught by Mullins, because by doing so, the combined invention will allow to use the created log table to keep track of status of each process and rollback the malfunction process as desired by an end user.

Claim 18:

This claim incorporates substantially similar subject matter as claim 1 in form of computer readable program product, hence is rejected along the same rational.

Claim 19:

This claim incorporates substantially similar subject matter as claim 3 in form of computer readable program product, hence is rejected along the same rational.

Claim Rejections - 35 USC § 103 (Continue)

Claims 5 and 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,222,533 issued to Notani et al. (hereinafter referred as Notani) in view of U.S. Publication No. 2005/0055355 issued to Murthy et al. (hereinafter referred as Murthy).

Claim 5:

Except the features recited in claim 1, Notani discloses a utility to build the database application [e.g., the use of unit 92 of Fig. 3 and associated texts; col. 6, lines 46 - col. 7, lines 46; col. 7, lines 18-25].

Notani did not expressly disclose inputting the XML files into the utility.

However, Murthy disclose inputting the XML files into the utility [e.g., the use of Xpath technique of Abstract, page 4, sections: 0040-48, 0052 – 0074, Fig. 6 and associated texts].

Notani and Murthy are both in the same endeavor to support the dynamic data querying and retrieving processing over the open Internet virtual database via object oriented architecture, thus, with the teachings of Notani and Murthy in front of him/her, it would have been obvious for an ordinary skilled person in the art at the time the invention was made to be motivated by modifying Notani's invention with the well-known Xpath algorithm to input the XML files into the utility as taught by Murthy, for the purpose as suggested by Murthy that the combined invention will convert any Xpath expression into a SQL query to search for one or more XML fragments to reconstruct the stored XML data in the utility database via the Xpath schema even if the XML data was originally not structured or semi-structured. [e.g., Murthy: Page 4, section: 0040-48, 0052 – 0074].

Claim 20:

This claim incorporates substantially similar subject matter as claim 5 in form of computer readable program product, hence is rejected along the same rational.

Response to Arguments

Applicant's arguments with respect to claims 1-20, have been considered but are moot in view of the new ground(s) of rejection.

The examiner disagrees with applicant's arguments and piece-meal interpretations that "Notani does not teach or disclose building application databases that are then stored in configuration tables."

In respond to the above arguments, the examiner first noted that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Furthermore, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., building application databases that are then stored in configuration tables) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

As to the rest of arguments, applicant merely rehashes issues already addressed on record, hence, the rejections are maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan Y. Chen whose telephone number is 571-272-4016. The examiner can normally be reached on Monday - Friday from 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Susan Y Chen
Examiner
Art Unit 2161



JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

November 8, 2006